Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 7 (Canceled)

8. (Currently amended) An isolated teneurin c-terminal associated peptide which has the amino acid sequence as shown in SEQ. ID. NO[[S]]: ~~13, 14, 21, 22, 29, 30, 37, 38, 45, 46, 53, 54, 61, 62, 69, 70, 77, 78, 85, 86, 93, 94, 101, 103, encoded by the isolated nucleic acid sequence of claim 1~~ or a ~~fragment,~~ analog, homolog, derivative or mimetic thereof or a biologically active fragment thereof.

9. (Original) An isolated teneurin c-terminal associated peptide of claim 8 further comprising an amidation signal sequence at the carboxy terminus.

10. (Original) A teneurin c-terminal associated peptide according to claim 8 wherein the peptide has anxiogenic activity.

11. (Canceled)

12. (Withdrawn) A method of identifying substances which can bind with a teneurin c-terminal associated peptide, comprising the steps of:
(a) incubating a teneurin c-terminal associated peptide of claim 8 and a test substance, under conditions which allow for formation of a complex between the teneurin c-terminal associated peptide and the test substance, and
(b) assaying for complexes of the teneurin c-terminal associated peptide and the test substance, for free substance or for noncomplexed teneurin c-terminal associated peptide, wherein the presence of complexes or reduced levels as compared to a starting level of free substance or non-complexed teneurin c-terminal associated peptide indicates that the test substance is capable of binding to the teneurin c-terminal associated peptide.

13. (Withdrawn) A method for identifying a compound that affects the activity or expression of teneurin c-terminal associated peptide comprising:

(a) incubating a test compound with a teneurin c-terminal associated peptide of claim 8 or a nucleic acid encoding a teneurin c-terminal associated peptide; and

(b) determining an amount of teneurin c-terminal associated peptide protein activity or expression and comparing with a control, wherein a change in the TCAP peptide activity or expression as compared to the control indicates that the test compound has an effect on TCAP peptide activity or expression.

14. (Withdrawn) The method of claim 13 wherein in step (a) a test compound is incubated with a teneurin c-terminal associated peptide and teneurin c-terminal associated peptide substrate under conditions that permit interaction of the peptide and substrate, and step (b) and in step (b) the peptide activity on the substrate is determined.

15. (Withdrawn) The method of claim 13, wherein in step (a) a cell expressing a teneurin c-terminal associated peptide and activity, is incubated with a test compound, under conditions where teneruin c-terminal associated peptide is active and in step (b) teneurin c-terminal associated peptide activity is determined.

16. (Withdrawn) The method of claim 15, wherein the teneurin c-terminal associated peptide activity is determined by detecting the levels of cAMP and cGMP before and after incubation with the test compound, or as compared to a control, wherein a change in magnitude of levels of cAMP or cGMP as compared to a baseline or control level is indicative that the test compound is a modulator of teneurin c-terminal associated peptide activity.

17. (Withdrawn) The method of claim 16, wherein the reduction of cAMP or cGMP in the presence of a test compound is less than in the control or baseline level or is greater than in the control or baseline level of TCAP activity indicates that the test compound is an inhibitor of c-teneurin associated peptide activity.

18. (Withdrawn) A method of claim 13 wherein the activity or expression of teneurin c-terminal associated peptide is the regulation of neuronal growth and wherein a change in the TCAP peptide activity or expression as compared to the control indicates that the test compound has an effect on the regulation of neuronal growth.

19. (Withdrawn) A method of inhibiting cell proliferation comprising administering to a cell, an effective amount of teneurin c-terminal associated peptide of claim 8 that inhibits cell proliferation.

20. (Withdrawn) A method according to claim 19 wherein the cell is selected from the group consisting of neuronal or fibroblast cells.

21. (Withdrawn-currently amended) A method of detecting a condition associated with the aberrant regulation of neuronal growth comprising assaying a sample for the presence of (a) a nucleic acid molecule encoding a teneurin c-terminal associated peptide of claim 8 or a fragment thereof or (b) the teneurin c-terminal associated peptide of claim 8 or a fragment thereof.

22. (Withdrawn-currently amended) A method of treating a condition associated with the aberrant regulation of neuronal growth comprising administering to a cell or animal in need thereof, an effective amount of a teneurin c-terminal associated peptide of claim 8 ~~or an agent that modulates teneurin c-terminal associated peptide expression and/or activity~~.

23. (Withdrawn) A method according to claim 22 wherein the agent is selected from the group consisting of: a nucleic acid molecule encoding teneurin c-terminal associated peptide; teneurin c-terminal associated peptide as well as fragments, analogs, derivatives or homologs thereof; antibodies; antisense nucleic acids; and peptide mimetics.

24. (Withdrawn) A method of inducing an anxiogenic response in a subject comprising administering to a subject an effective amount of teneurin c-terminal associated peptide of claim 8 to induce an anxiogencic response.

25. (Withdrawn) A method of inihibiting an anxiogenic response in a subject comprising administering to a subject an effective amount of an inhibitor of teneruin c-terminal associated peptide of claim 8 to inhibit an anxiogenic response.

26. (Withdrawn) A method of claim 25 wherein the inhibitor is identified according to the method of claim 13.

27. (Withdrawn) A method of inhibiting the damage caused by physiological stresses comprising administering to a cell, an effective amount of teneurin c-terminal associated peptide of claim 8 that protects cells from the physiological stresses.

28. (Withdrawn-currently amended) A method of modulating the stress response in an animal comprising administering an effective amount of ~~TCAP~~ the peptide of claim 8 to said animal.

29. (Withdrawn-currently amended) A method of modulating anxiety response in an animal comprising administering an effective amount of ~~TCAP~~ the peptide of claim 8 to said animal.

30. (Withdrawn-currently amended) The method of increasing anxiety in a low anxiety animal comprising administering to said animal an effective amount of ~~TCAP~~ the peptide of claim 8.

31. (Withdrawn-currently amended) A method of decreasing anxiety in a high anxiety animal comprising administering to said animal an effective amount of ~~TCAP~~ the peptide of claim 8.

32. (Withdrawn-currently amended) A method of normalizing anxiety response in an animal comprising administering to said animal an effective amount of ~~TCAP~~ the peptide of claim 8.

33. (Withdrawn-currently amended) A method of treating cancer in an animal comprising administering an effective amount of ~~TCAP~~ the peptide of claim 8 to said animal.

34. (Currently amended) A pharmaceutical composition comprising ~~TCAP~~ the peptide of claim 8 and a pharmaceutically acceptable vehicle.

35. (New) An isolated peptide consisting essentially of a 38 -41 amino acid sequence, wherein the amino acid sequence is the 38-41 amino acid sequence of the carboxy terminus of human Ten M1 (SEQ. ID. NO. 8) minus the amidation sequence, or analog, derivative, homolog or variants thereof or anxiolytic or anxiogenic fragment thereof or pharmaceutically acceptable salt thereof.

36. (New) An isolated peptide of claim 35 further comprising an amidation signal sequence at the carboxy terminus.

37. (New) An isolated peptide of claim 35 selected from SEQ. ID. NOs. 69 or 70 or analog, derivative, species homolog or or anxiolytic or anxiogenic fragment thereof or a pharmaceutically acceptable salt thereof.

38. (New) An isolated peptide of claim 36 having SEQ. ID. NO. 69 or analog, derivative, species homolog or anxiolytic and/or anxiogenic fragment thereof or a pharmaceutically acceptable salt thereof.

39. (New) An isolated peptide of claim 38 that has at least 95% identity to SEQ. ID. NO. 69.

40 (New) An isolated peptide of claim 36, having SEQ. ID. NOs. 71 or 72.

41.(New) An isolated peptide of claim 39 consisting essentially of SEQ. ID. NO. 69.

42.(New) An isolated peptide of claim 35 having anxiolytic and/or anxiogenic activity.

43. (New) An isolated peptide which is a homologue of claim 35 consisting essentially of a 38 - 41 amino acid sequence, wherein the amino acid sequence is the 38-41 amino acid sequence of the carboxy terminus of mouse Ten M1 (SEQ. ID. NO. 4) minus the amidation sequence, or analog, derivative, homolog or variants thereof or anxiolytic or anxiogenic fragment thereof or pharmaceutically acceptable salt thereof.

44. (New) An isolated peptide of claim 43 further comprising an amidation signal sequence at the carboxy terminus.

45. (New) An isolated peptide of claim 43 selected from SEQ. ID. NOs. 37 or 38 or analog, derivative, species homolog or anxiolytic or anxiogenic fragment thereof or a pharmaceutically acceptable salt thereof.

46. (New) An isolated peptide of claim 45 having SEQ. ID. NO. 37 or analog, derivative, species homolog or anxiolytic and/or anxiogenic fragment thereof or a pharmaceutically acceptable salt thereof.

47. (New) An isolated peptide of claim 46 that has at least 95% identity to SEQ. ID. NO. 37.

48 (New) An isolated peptide of claim 44, having SEQ. ID. NOs. 39 or 40.

49.(New) An isolated peptide of claim 43 consisting essentially of SEQ. ID. NO. 37.

50.(New) An isolated peptide of claim 43 having anxiolytic and/or anxiogenic activity.

51.(New) A pharmaceutical composition comprising the peptide of claim 35 and a pharmaceutically acceptable vehicle.

52. (New) A pharmaceutical composition comprising the peptide of claim 44 and a pharmaceutically acceptable vehicle.